

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 43

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte KRISTER RAITH  
and  
NILS RYDBECK

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Appeal No. 1997-0622  
Application No. 08/414,051

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HEARD: OCTOBER 9, 2001

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Before HAIRSTON, KRASS, and BLANKENSHIP, Administrative Patent Judges.

HAIRSTON, Administrative Patent Judge.

DECISION ON APPEAL

This appeal involves claims 1 through 35. In an amendment (paper number 35) filed after the notice of appeal (paper number 33), claims 1 and 27 were amended.

The disclosed invention relates to a method and apparatus for enabling access of a mobile station to a base station on a digital multiple-access control channel in a cellular mobile

Appeal No. 1997-0622  
Application No. 08/414,051

radiotelephone system.

Claim 1 is illustrative of the claimed invention, and it reads as follows:

1. In a cellular mobile radio telephone system, a method of access of a mobile station to a base station on a digital multiple-access control channel, said method comprising the steps of:

    sending a first access burst from the mobile station to the base station;

    sending information from the base station to the mobile station indicating to the mobile station a timing adjustment, a length of the timing adjustment being related to propagation delay according to which the mobile station is to send a subsequent second access burst, the second access burst being longer than the first access burst; and

    sending said second access burst from said mobile station to said base station.

The references relied on by the examiner are:

Grael et al. (Grael)	4,815,073	Mar. 21, 1989 (filed Jul. 15, 1986)
Dahlin et al. (Dahlin)	5,119,397	Jun. 2, 1992 (filed Apr. 26, 1990)
D'Amico et al. (D'Amico)	5,127,100	Jun. 30, 1992 (filed Apr. 27, 1989)
Riordan	5,184,349	Feb. 2, 1993 (effective filing date Jan. 16, 1991)

Appeal No. 1997-0622  
Application No. 08/414,051

Barnes et al. (Barnes)	5,416,779	May 16,
		1995
	(effective filing date Nov. 26,	
1990)		

Appeal No. 1997-0622  
Application No. 08/414,051

Claims 2 through 10, 14 through 18 and 21 through 26<sup>1</sup> stand rejected under the second paragraph of 35 U.S.C. § 112 as being indefinite.

Claims 1, 11 through 13, 19, 20, 27, 28 and 32 through 35 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Barnes.

Claims 2, 4 through 10, 14 through 18 and 21 stand rejected under 35 U.S.C. § 103 as being unpatentable over Barnes.

Claims 28, 30 and 31 stand rejected under 35 U.S.C. § 103 as being unpatentable over Riordan in view of Grauel.

Claim 29 stands rejected under 35 U.S.C. § 103 as being unpatentable over D'Amico in view of Riordan and Grauel.

Claims 32 through 35 stand rejected under 35 U.S.C. § 103 as being unpatentable over Dahlin in view of Grauel.

Reference is made to the brief (paper number 36) and the answer (paper number 37) for the respective positions of the appellants and the examiner.

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<sup>1</sup> According to the examiner (answer, page 1), claims 3 and 23 through 26 would be allowable if rewritten to overcome the rejection under 35 U.S.C. § 112, and to include all of the limitations of the base claim and any intervening claims.

Appeal No. 1997-0622  
Application No. 08/414,051

OPINION

We have carefully considered the entire record before us, and we will reverse all of the rejections with the exception of the indefiniteness rejection of claims 2 through 10, 14 through 18 and 21 through 26, and the anticipation rejection of claims 32 and 34.

Turning first as we must to the indefiniteness rejection, the examiner contends (answer, page 5) that the phrase "TIA digital cellular standard" is indefinite because "standards change over time and there are more than one version of the TIA digital cellular standard." In response, appellants argue (brief, page 5) that:

The fact that the standard may change has no bearing on the clarity of the claim insofar as one is reasonably apprised that this access burst has the same duration and bit rate as a shortened burst transmitted on an uplink channel according to a given standard, whatever the standard might be at the time.

Although a specific EIA/TIA-54 standard is disclosed (specification, pages 4, 5, 11, 25, 26 and 32), appellants have not chosen to limit the claimed invention to that particular standard. Instead they have chosen to broadly claim a TIA standard to leave open the possibility that the

standard may change at some future date. Stated differently, appellants wish to cover any future standards, even those not contemplated by the appellants on the filing date of the application. Inasmuch as appellants are under a statutory obligation to inform the public of the metes and bounds of their claimed invention, we find that appellants have failed to perform that obligation by presenting claims that leave open the possibility of future coverage of some unknown changes to the TIA standard. For this reason, we agree with the examiner (answer, page 5) that claims 2 through 10, 14 through 18 and 21 through 26 are indefinite because they fail to particularly point out and distinctly claim appellants' invention.

In a separate ground of rejection of claim 18, the examiner indicated (answer, page 5) that the phrase "said mobile identification information does not uniquely identify a mobile station" is confusing because "if the mobile identification information does not identify the mobile station, then what does the mobile identification information do?" Appellants' disclosure states (specification, page 30, lines 1 through 3) that "[t]he MIN information may be full,

Appeal No. 1997-0622  
Application No. 08/414,051

uniquely identifying the mobile station, or partial, not  
identifying the mobile station uniquely." Appellants explain  
(brief, pages 5 and 6) that:



Appeal No. 1997-0622  
Application No. 08/414,051

[T]he mobile identification number in claim 18 is somewhat akin to the last name of a person. While the last name of a person identifies that person, it does not uniquely identify that person within the person's family where [there] are other people with the same last name.

When the claimed invention is considered in light of appellants' disclosed invention, and the above-quoted explanation of the disclosed invention, we find that the noted phrase does not render claim 18 indefinite.

Based upon the foregoing, the rejection of claims 2 through 10, 14 through 18 and 21 through 26 under the second paragraph of 35 U.S.C. § 112 is sustained.

Turning next to the anticipation rejection of claims 1, 11 through 13, 19, 20, 27, 28 and 32 through 35, a review of Barnes (Figure 2) reveals that the base station 3 and the mobile handset 11 must both complete their transmissions to each other within a 2 millisecond burst period. Although "the timing of the handset **11** must be slaved to the timing of the base station **3**," the base station always initiates the burst period at each 2 millisecond interval (column 23, lines 6 through 24). If the base station sends the first data burst, then the first step of claims 1 and 27 can not be met by the

teachings of Barnes. Although the mobile station 3 adjusts its timing based upon the transmission timing of the base station 3, the timing adjustment is not based upon a "propagation delay" as set forth in claims 1 and 27. More importantly, the subsequent transmission by the mobile station 11 in the next 2 millisecond burst period does not have to be longer than the first transmission by the mobile station (brief, page 8). Thus, the 35 U.S.C. § 102(e) rejection of claims 1 and 27 is reversed because all of the limitations of these claims are not found in the teachings of Barnes.

Although Barnes uses two different transmission formats, namely multiplex 1.2 and multiplex 1.4 (column 20, line 60 through column 22, line 6), appellants argue (brief, pages 9 through 12) that Barnes' transmission technique during the above-noted 2 millisecond burst transmission period (Figure 2) does not involve "sending information from said base station to said mobile station indicating whether or not a subsequent access burst is expected" as required by claims 11 through 13, 19, 20 and 28. We agree. The 35 U.S.C. § 102(e) rejection of claims 11 through 13, 19, 20 and 28 is reversed.

Appeal No. 1997-0622  
Application No. 08/414,051

Turning to claims 32 and 34, if the base station in Barnes communicates with the mobile station with one of the two above-noted transmission formats, then the mobile station responds with the same transmission format (column 20, line 47 through column 22, line 6). Appellants' arguments (brief, page 12) to the contrary notwithstanding, Barnes discloses a "plurality of communication formats involving different lengths of bursts" because the bit length of multiplex 1.2 differs from the bit length of multiplex 1.4. For these reasons, the 35 U.S.C.

§ 102(e) rejection of claims 32 and 34 is sustained.

Although the two above-noted transmission formats may be considered a format of short bursts and a format of long bursts, Barnes is completely silent concerning "a format of a combination of a short burst followed by one or more long bursts" as set forth in claims 33 and 35. Accordingly, the 35 U.S.C. § 102(e) rejection of claims 33 and 35 is reversed.

For all of the reasons expressed supra in connection with the reversal of the anticipation rejection of independent claims 1 and 11, the 35 U.S.C. § 103 rejection of claims 2, 4 through 10, 14 through 18 and 21 is reversed.

In the obviousness rejection of claims 28, 30 and 31, the examiner contends (answer, page 7) that Riordan discloses all of the claimed subject matter "except for the mobile station is to send a subsequent second burst to the base station." For such a teaching, the examiner turns to Grauel which teaches that "the second access burst (signal) being longer than the first access burst (column 4, lines 5-15, column 6, lines 29-35, and column 11, lines 37-55) in mobile radio telephone system (column 3, lines 53-61) for the purpose of avoiding collisions of access burst (signals) from mobile stations" (answer, page 7). For such an advantage, the examiner contends (answer, page 8) that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of mobile station is to send a subsequent second burst to the base station, the second access burst being longer than the first access burst, as taught by **Grauel et al**, in the cellular mobile radio telephone system of **Riordan**." In Riordan, a radio channel unit 140 in the base station 115 performs automatic gain control (AGC) of a received random access burst 200 (Abstract;

Appeal No. 1997-0622  
Application No. 08/414,051

column 1, lines 66 through 68; column 3, lines 18 through 20).

Inasmuch as Riordan is silent concerning the transmission of any type of information to the mobile station, we agree with the appellants' argument (brief, page 15) that Riordan lacks means and a step of sending from the base station to the mobile station information indicating that the base station is to be accessed according to one of a plurality of access methods involving different numbers/types of bursts from the mobile station to the base station. Appellants argue (brief, page 16) that:

Appeal No. 1997-0622  
Application No. 08/414,051

The Grauel et al. patent does not supply the teachings missing from the Riordan patent, even if one were to assume some logical combination of the teachings of these two patents. The Grauel et al. patent discloses a method of accessing transmission channels in a communication system which includes the use of short access bursts. The Grauel et al. patent discloses the purpose of the shortened access bursts is to avoid blockage of a service channel. As mentioned at column 4, lines 16-35, in the Grauel et al. system, access attempts are made by mobile systems in order to enable initiation of subscriber information transfer. An access attempt starts with an access request formed by a short access signal. It continues with a response from the central base station and is completed with a regular access signal sent by the mobile station.

The base station in the Grauel et al. system does not send timing adjustment information according to which a subsequent second access signal is to be sent . . . .

Based upon the teachings of the applied references, it is clear that the mobile stations in each of the references initiates the transmission sequence whereas in each of claims 28, 30 and 31 the base station initiates the transmission sequence by sending information to the mobile stations. Thus, the 35 U.S.C. § 103 rejection of claims 28, 30 and 31 is reversed because we agree with appellants' argument (brief, page 17) that "no matter how one attempts to combine or construe these patents, they would not result in the claimed

invention."

In the rejection of claim 29, the examiner contends (answer, page 10) that D'Amico discloses a "step of receiving an indication of the relative size of a cell (column 2, line[s] 39-54)." Although D'Amico discloses that cells of various sizes are provided (column 2, lines 30 and 31), and that smaller cells should be used for high density communications traffic areas and larger cells should be used for low density communications traffic areas (column 2, lines 39 through 54), D'Amico, Riordan and Grauel do not disclose a mobile station that receives an indication of the relative size of a cell wherein the mobile station is located, and based on this received signal transmits "an initial access burst of a duration calculated, based on said indication of cell size, to avoid burst collisions with transmissions of other mobile stations at a base station of said cell" (brief, page 18). Accordingly, the 35 U.S.C. § 103 rejection of claim 29 is reversed.

Turning lastly to the obviousness rejection of claims 32 through 34, we noted supra that each of these claims requires the base station to initiate information exchange, and that

the mobile station in Grauel initiates information exchange (column 4, lines 5 through 36; column 5, lines 6 through 26; and column 6, lines 47 through 61). Even if we assume for the sake of argument that the word 1 and the word 2 disclosed by Dahlin (column 4, lines 19 through 51) are two different communications formats as stated by the examiner (answer, page 12), we agree with the appellants' argument (brief, page 19) that "[i]t is difficult to see how the Examiner translates this as the base station commanding the mobile station to communicate in a particular one of a plurality of communication formats, or, of more relevance, how it renders obvious such features of claims 32 and 34 as the method and means of sending on a digital multiple-access channel from the base station to the mobile station information indicating that the base station is to be communicated with according to a particular one of a plurality of communication formats, different ones of the plurality of communication formats involving different lengths of bursts from the mobile station to the base station, and sending bursts from the mobile station to the base station according to the particular one of a plurality of communication formats." In summary, the 35



Appeal No. 1997-0622  
Application No. 08/414,051

U.S.C. § 103 rejection of claims 32 through 35 is reversed.

Appeal No. 1997-0622  
Application No. 08/414,051

DECISION

The decision of the examiner rejecting claims 2 through 10, 14 through 18 and 21 through 26 under the second paragraph of 35 U.S.C. § 112, and claims 32 and 34 under 35 U.S.C. § 102(e) is affirmed. All of the examiner's other rejections are reversed. Accordingly, the decision of the examiner is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

KENNETH W. HAIRSTON	)	
Administrative Patent Judge	)	
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	)	BOARD OF PATENT
ERROL A. KRASS	)	APPEALS AND
Administrative Patent Judge	)	INTERFERENCES
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HOWARD B. BLANKENSHIP	)	
Administrative Patent Judge	)	

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Appeal No. 1997-0622  
Application No. 08/414,051

Appeal No. 1997-0622  
Application No. 08/414,051

RONALD L. GRUDZIECKI  
BURNS, DOANE, SWECKER & MATHIS  
P.O. BOX 1404  
ALEXANDRIA, VA 22313-1404